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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,587	12/11/2003	Kiyoshi Yoshino	230980-0253	8234
23392	7590	08/10/2005	EXAMINER	
FOLEY & LARDNER				WARREN, DAVID S
2029 CENTURY PARK EAST				
SUITE 3500				
LOS ANGELES, CA 90067				
				ART UNIT
				PAPER NUMBER
				2837

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/733,587	YOSHINO, KIYOSHI	
	Examiner David S. Warren	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 11 December 2003.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-35 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-3,5-16,18-26 and 28-35 is/are rejected.
 7) Claim(s) 4,17,27 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1.) Certified copies of the priority documents have been received.
 2.) Certified copies of the priority documents have been received in Application No. _____.
 3.) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/30/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 5, 7, 8, 10, 24, 25, 28, 30, 31, and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by May (4,168,646). Regarding independent claims 1 and 24, May discloses the use of an electronic percussion instrument comprising a frame (40) further comprising an outer peripheral section (44), a center section (46), and a linking section (that portion where 44 and 46 overlap), and a rim shot detector (52).

The Examiner notes that element 52 is available to "receive acoustical impulses separately from the drum head and the drum shell" (see Abstract) – i.e., those impulses from the drum shell are deemed to be the rim shots. The Examiner further notes that claim 24 (and dependent claim 10) has the additional limitation of a head sensor – this limitation is met by May's use of a second microphone as shown in fig. 3 as elements 15. It is acknowledged that both elements 15 in fig. 3 of May will sense both rim shots and head vibrations – however, it is maintained that the microphone closest the rim and sidewall will be better at sensing rim shots. Regarding claims 2 and 25, May provides a flange (50; col. 5, lines 15 – 19). Regarding claims 5 and 28, May discloses the use of use of legs (col. 4, lines 66 – 68). Regarding claims 7 and 30, May discloses the use of arms with openings (col. 5, lines 2 – 3). Regarding claims 8 and 31, the linking section

of May contains openings (e.g., for bolts 41, 45, and microphone 52; see fig. 4).

Regarding claim 35, see elements 8, fig. 1).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3, 6, 9, 11, 12, 13, 14, 16, 19, 22, 23, 26, 29, and 32 – 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over May (discussed *supra*) in view of Yoshino et al. (5,920,026). The teachings of May have been discussed *supra*.

Regarding independent claim 14 and dependent claims 11, 12, 22, and 33, May does not disclose the use of the frame and sensors in conjunction with a cushion for engaging a head of the percussion instrument to transmit vibrations of the head to the head sensor. Yoshino clearly discloses such a cushion (80; fig. 7b). Regarding claims 3, 16, and 26, the use of concave-convex surfaces do not appear to provide any functional difference from that of either May nor Yoshino, therefore, these junction surfaces are deemed to be obvious matters of design choice. Regarding claims 6, 19, and 29, the use of U-shaped supporting members is well-known to provide added structural stability (this is corroborated by the Japanese patent cited by the Applicant – JP10198375 – or any text on mechanics or civil engineering), therefore this feature is deemed a design choice. Regarding claims 9, 13, 23, 32, and 34, Yoshino discloses the use of bonding sensors by the use of “cushioning double-coated tape (see element

78; figs. 7a – 7c). Regarding claims 15, 18, 20, and 21, these limitations are identical to claims 2, 5, 7, and 8, respectively, all of which have been addressed supra.

Allowable Subject Matter

5. Claims 4, 17, and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art does not disclose the use of “an outer peripheral section of the frame compris[ing] a plurality of slits extending through the flange and into a sidewall of the outer peripheral section.”

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patent to Pozar discloses a frame within a drum for supporting a sensor.

7. The Examiner questions Applicant's inclusion on IDS 1449 of Japanese document JP 2-117569. It appears that this reference may have been erroneously included in the prosecution of the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David S. Warren whose telephone number is 571-272-2076. The examiner can normally be reached on M-F, 9:30 A.M. to 6:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on 571-272-2800 ext 37. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dsw



MARLON T. FLETCHER
PRIMARY EXAMINER